



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/853,323	05/08/97	TALIER	17

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QM111/0127

EXAMINER

ROSEN, G

ART UNIT

3725

PAPER NUMBER

DATE MAILED:

01/27/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/853,323

Applicant(s)

Talieh et al.

Examiner

Nguyen

Group Art Unit

3723

☒ Responsive to communication(s) filed on Dec 9, 1998

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 32, 34, and 36-43 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 32, 34, and 36-43 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 32, 34, 36, 37, 38, and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation that “for polishing a semiconductor wafer” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

In addition, the amended phrase “chemical mechanical planarization” is indefinite because the scope of the claim is unascertainable. Any polishing process is involved some type of chemical mechanical planarization.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 32, 34, and 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sampietro'309 in view of McGarvey'765 and Kircher et al.'743.

Sampietro discloses an abrasive tool comprising an abrasive containing layer and a fabric backing layer adapted to be fastened to a plate on the machine. The term "tool" is used to describe all forms of releasably attached discs, belts or trips. With reference to Fig. 2, the polishing pad includes a flexible support (3) and a coating of an abrasive material (4). Adhered to the other side of the flexible support (3) is a layer (5) of a resilient material such as polyurethane, EPDM polymer. Other hardware necessary to run the belt is well-known in the art. But Sampietro does not disclose the belt being formed of metal.

McGarvey discloses an abrasive belt. With reference to column 2, lines 12-22, McGarvey discloses that the backing material may consist of any conventional backing used in abrasive coated products. The backing material (1) may be glue, resin, or varnish, the choice of which depends on the desired flexibility and stretch, resistance to heat and other factors which are determined by the intended use of the finished article and production requirements.

Kircher et al.'743 discloses an abrasive coating article. With reference to Figs. 1-3, the polishing pad 2 is attached to a metal backing 2, such as steel, brass, copper, or aluminum. The metal backing provides flexibility, resiliency, and strength, as well as having the property of preventing warpage in the finished article.

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Sampietro discloses the claimed invention except for the belt being formed of metal. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the belt being formed of metal since it was known in the art as taught by McGarvey and Kircher that the choice of the metal backing material would provide the desired flexibility, resistance to heat, and strength to prevent warpage in the finished article.

Response to Arguments

4. Applicant's arguments with respect to claims 32, 34, and 36-41 have been considered but are moot in view of the new ground(s) of rejection.

Essentially, the applicant claims a polishing belt with metal backing. There is no other patentable distinction over the prior art of record.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

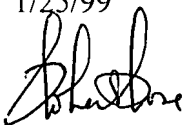
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Nguyen whose telephone number is (703) 308-0163. The examiner can normally be reached on Monday-Friday from 7:00 AM-3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Scherbel, can be reached at (703) 308-1272. The fax number for this Group is (703) 305-3579.

An inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-1148.

George Nguyen

1/25/99



**ROBERT A. ROSE
PRIMARY EXAMINER
ART UNIT 323**